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## REMARKS

The Applicants intend the present response to be fully responsive to the rejection raised in the Office Action, and believe the present response places the application in condition for allowance. Further, the Applicants do not acquiesce to any portion of the Office Action not particularly addressed. The Applicants respectfully request favorable reconsideration and allowance of the application.

As set forth the Office Action, the Office noted that (i) claims 1-39 are pending ("pending claims") and (ii) each of the pending claims are rejected under the provisions of 35 U.S.C. §§102, 103 and 112 based on either one or more cited references or opinions of the Office. In light of the following discussion, the Applicants submit that none of the pending claims are rendered anticipated or obvious in view of the cited references, and none of the pending claims are rendered unpatentable for failing to meet the provisions of 35 U.S.C. §112 in view of the opinions of the Office. Thus, the Applicants believe that all of the claims 1-39 are patentable and in condition for allowance.

### I. REJECTIONS

#### A. Response to §112 Rejection of Claims 1-39

The Office rejected claims 1-39 under 35 U.S.C. §112, second paragraph, because the claimed elements "long term" (*long term*) are indefinite. The Applicants respectfully traverse this rejection.

More specifically, the Applicants submit that the claimed elements *long term* are clear, not indefinite, and as claimed by the Applicants (i.e., as modifying the claimed elements satellite tracking data) make clear that the *long term* satellite tracking data is not conventional ephemeris and related information (collectively "ephemeris information"). Given that claims are read in light of the specification, the Applicants direct the Office to the specification of the present application, which includes a thorough disclosure focused on and providing details pertaining to the claimed elements *long term* satellite tracking data (*long term* STD).

Throughout this disclosure, the Applicants provide a multiplicity of examples that individually and/or together make clear that the claimed elements *long term*, as modifying the STD, (i) define a duration (e.g., a period) of validity of the STD that distinguishes the claimed *long term* STD from ephemeris that is broadcast in and

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obtained from a satellite signal (i.e., conventional ephemeris information), and (ii) indicate that the *long term* STD is valid longer (in time) than the conventional ephemeris information. In fact, the specification at page 8, paragraph [0026] explicitly states "the satellite tracking data [...] may be referred to herein as 'long term satellite tracking data' in order to distinguish such data from the broadcast ephemeris." See the rest of the present application for more details regarding the *long term* STD.

In view of the foregoing, the Applicants submit that the claims 1-39 are not indefinite. As such, the Applicants submit the claims 1-39 particularly point out and distinctly claim the Applicants' invention under 35 U.S.C. §112, second paragraph, and therefore, submit that the claim 1-39 are patentable.

#### **B. Response to §102(b) Rejection of Claims 1-39**

The Office also rejected claims 1-39 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,222,483 granted to Twitchell et al. ("*Twitchell*"). The Applicants respectfully traverse this rejection.

More specifically, the Office contended that *Twitchell* teaches all of the claimed elements of all of the claims 1-39. In support of this contention, the Office's entire rejection of claims 1-39 (and all the claimed elements thereof) is set forth in the following quote: "a position location system, a receiver, and a method including receiving 42 long term satellite tracking data at a remote receiver from a server 56, computing (72; abstract) acquisition assistance data using the long term satellite tracking data at the remote receiver, and receiving 42 satellite signals at the remote receiver using the acquisition assistance data" (emphasis added).

The Applicants note that the abstract of *Twitchell* merely states that the "server includes a data store which contains satellite positioning information [...] and] in response to a message from the remote unit, the server provides satellite information to the system controller over the communication infrastructure such that the provided satellite information is passed to the remote unit by the base station" (emphasis added). In addition, the Applicants note that the abstract of *Twitchell* states that the "provided satellite information includes information to aid in acquiring a predetermined number of satellites within a satellite positioning system" (emphasis added). The Applicants submit, however, this disclosure (and the rest of *Twitchell*) falls far short of disclosing the Applicants' invention, and to the contrary, merely

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discloses conventional ephemeris information (i.e., its "satellite positioning information"), which is typically valid for no longer than about 4 hours. See, e.g., *Twitchell*, at col. 8, lines 53-61.

The Applicants' invention, in contrast to *Twitchell*, includes a combination of elements directed to *long term* STD, which, as noted above, (i) has a duration of validity that distinguishes it from conventional ephemeris information, and (ii) is valid longer (in time) than such conventional ephemeris information. Specifically, the Applicants' independent claim 1 positively recites:

"A method, comprising:

receiving long term satellite tracking data at a remote receiver from a server;

computing acquisition assistance data using said long term satellite tracking data at said remote receiver; and

receiving satellite signals at said remote receiver using said acquisition assistance data" (emphasis added).

Each of the other independent claims 22, 29 and 34 include one or more claimed elements directed to the *long term* STD.

Contrary to the Office's contentions, the Applicants submit that the above-listed sections (and the rest of) *Twitchell* does not disclose, whatsoever, the claimed *long term* STD, that is, satellite tracking data that has a duration (e.g., a period) of validity of the STD that distinguishes it from conventional ephemeris information, and that is valid longer (in time) than the conventional ephemeris information. In fact, *Twitchell* discloses that its "satellite positioning information" is nothing more than conventional ephemeris information. See, e.g., *Twitchell* at its background; col. 4, lines 53-58; col. 8, lines 42-47; and col. 9, lines 3-7.

Since *Twitchell* lacks at least one element of each of the independent claims 1, 22, 29 and 34, namely the claimed elements *long term* STD, the Applicants submit that *Twitchell* does not anticipate the claimed invention under 35 U.S.C. §102(b). As such, the Applicants submit that each of the independent claims 1, 22, 29 and 34 are patentable over *Twitchell*.

Claims 2-21, 23-28, 30-33 and 35-39 depend, either directly or indirectly, from claims 1, 22, 29 and 34. Since the Applicants submit that *Twitchell* fails to anticipate the independent claims 1, 22, 29 and 34 for the reasons set forth above, the Applicants further submit that *Twitchell* likewise fails to anticipate each of the dependent claims 2-21, 23-28, 30-33 and 35-39. Thus, the Applicants submit that

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the claims 2-21, 23-28, 30-33 and 35-39 fully satisfy the requirements of 35 U.S.C. §102, and therefore, are allowable.

### **C. Response to §102(e) Rejection of Claims 1-39**

The Office also rejected claims 1-39 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. U.S. Patent Publication No. 2005/0003833 filed by Younis ("*Younis*") or U.S. Patent No. 6,856,282 granted to Mauro et al. ("*Mauro*") or U.S. Patent Publication No. 2004/0203853 filed by Sheynblat ("*Sheynblat*") or European Patent No. 1,197,761 granted to McBurney et al. ("*McBurney*"). The Applicants respectfully traverses each of these rejections.

Like above, the Office contended that each of *Younis*, *Mauro*, *Sheynblat* and *McBurney* teaches all of the claimed elements of all of the claims 1-39. In support of such contentions, the Office's entire rejection of claims 1-39 (and all the claimed elements thereof) based on each of *Younis*, *Mauro*, *Sheynblat* and *McBurney* is set forth in the following quotes:

- "*Younis* teaches a position location system, a receiver, and a method including receiving 14 long term satellite tracking data at a remote receiver from a server 26, computing 70, 82, 88 acquisition assistance data using the long term satellite tracking data at the remote receiver, and receiving 14 satellite signals at the remote receiver using the acquisition assistance data;"
- "*Mauro* [ ] teach[es] a position location system, a receiver, and a method including receiving 4 long term satellite tracking data at a remote receiver from a server 10, computing (47; abstract) acquisition assistance data using the long term satellite tracking data at the remote receiver, and receiving 4 satellite signals at the remote receiver using the acquisition assistance data;"
- "*Sheynblat* teaches a position location system, a receiver, and a method including receiving 120a long term satellite tracking data at a remote receiver from a server 120b, computing (140; paragraph 0087) acquisition assistance data using the long term satellite tracking data at the remote receiver, and receiving 120a satellite signals at the remote receiver using the acquisition assistance data;" and
- "*McBurney* [ ] teach[es] a position location system, a receiver, and a method including receiving 102 long term satellite tracking data at a remote receiver

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from a server 106, computing 114 acquisition assistance data using the long term satellite tracking data at the remote receiver, and receiving 102 a satellite signals at the remote receiver using the acquisition assistance data.”

**Younis**

With respect to any satellite positioning information disclosed in *Younis*, the Applicants submit that the abstract (and rest) of *Younis* merely discloses conventional ephemeris information. The Applicants’ invention, in contrast to *Younis*, includes a combination of elements directed to the *long term* STD, which, as noted above, (i) has a duration of validity that distinguishes it from conventional ephemeris information, and (ii) is valid longer (in time) than such conventional ephemeris information. Specifically, the Applicants’ independent claim 1 positively recites:

“A method, comprising:

receiving long term satellite tracking data at a remote receiver from a server;

computing acquisition assistance data using said long term satellite tracking data at said remote receiver; and

receiving satellite signals at said remote receiver using said acquisition assistance data” (emphasis added).

Each of the other independent claims 22, 29 and 34 include one or more claimed elements directed to the *long term* STD.

Contrary to the Office’s contentions, the Applicants submit that the above-listed sections (and the rest) of *Younis* does not disclose, whatsoever, the claimed *long term* STD, that is, satellite tracking data that has a duration (e.g., a period) of validity of the STD that distinguishes it from conventional ephemeris information, and that is valid longer (in time) than the conventional ephemeris information.

The Applicants note that *Younis* is foremost focused on synchronizing clocks between its mobile unit and server, so as to compensate for a time offset between such clocks to allow for exchange between its server and its mobile unit an appropriate portion of the conventional ephemeris information. See, e.g., *Younis* at Summary of Invention, paragraphs [0012]-[0017]. By compensating for an offset between the clocks of its server and its mobile unit as set forth in *Younis*, satellite positioning information (i) is valid when received at its mobile unit, and (ii) does not

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become invalid during as a result of the offset between the clocks of its server and its mobile. See *Younis*, at page 5, paragraph [0037].

The Applicants submit that any of the satellite positioning information disclosed in *Younis* is not the claimed *long term* STD; that is, nothing in the disclosure of *Younis* teaches or suggests that its satellite information has a duration of validity that distinguishes it from conventional ephemeris information, and that is valid longer (in time) than the conventional ephemeris information. Since *Younis* lacks at least one element of each of the independent claims 1, 22, 29 and 34, namely the claimed elements *long term* STD, the Applicants submit that *Younis* does not anticipate the claimed invention under 35 U.S.C. §102(e). As such, the Applicants submit that each of the independent claims 1, 22, 29 and 34 are patentable over *Younis*.

Claims 2-21, 23-28, 30-33 and 35-39 depend, either directly or indirectly, from claims 1, 22, 29 and 34. Since the Applicants submit that *Younis* fails to anticipate the independent claims 1, 22, 29 and 34 for the reasons set forth above, the Applicants further submit that *Younis* likewise fails to anticipate each of the dependent claims 2-21, 23-28, 30-33 and 35-39. Thus, the Applicants submit that the claims 2-21, 23-28, 30-33 and 35-39 fully satisfy the requirements of 35 U.S.C. §102, and therefore, are allowable.

### **Mauro**

With respect to any satellite positioning information disclosed in *Mauro*, the Applicants submit that the abstract (and rest) of *Mauro* merely discloses conventional ephemeris information. The Applicants' invention, in contrast to *Mauro*, includes a combination of elements directed to the *long term* STD, which, as noted above, (i) has a duration of validity that distinguishes it from conventional ephemeris information, and (ii) is valid longer (in time) than such conventional ephemeris information. Specifically, the Applicants' independent claim 1 positively recites:

"A method, comprising:

receiving long term satellite tracking data at a remote receiver from a server;

computing acquisition assistance data using said long term satellite tracking data at said remote receiver; and

receiving satellite signals at said remote receiver using said acquisition assistance data" (emphasis added).

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Each of the other independent claims 22, 29 and 34 include one or more claimed elements directed to the *long term* STD.

Contrary to the Office's contentions, the Applicants submit that the above-listed sections (and the rest) of *Mauro* does not disclose, whatsoever, the claimed *long term* STD, that is, satellite tracking data that has a duration (e.g., a period) of validity of the STD that distinguishes it from conventional ephemeris information, and that is valid longer (in time) than the conventional ephemeris information. Instead, *Mauro* discloses obtaining P-codes from the conventional ephemeris information, whether obtained from the satellites themselves or from a terrestrial server. See, e.g., *Mauro*, at Summary, col. 2, line 24-col. 3, line 33.

The Applicants submit that any of the satellite positioning information disclosed in *Mauro* is not the claimed *long term* STD; that is, nothing in the disclosure of *Mauro* teaches or suggests that its satellite information has a duration of validity that distinguishes it from conventional ephemeris information, and that is valid longer (in time) than the conventional ephemeris information. Since *Mauro* lacks at least one element of each of the independent claims 1, 22, 29 and 34, namely the claimed elements *long term* STD, the Applicants submit that *Mauro* does not anticipate the claimed invention under 35 U.S.C. §102(e). As such, the Applicants submit that each of the independent claims 1, 22, 29 and 34 are patentable over *Mauro*.

Claims 2-21, 23-28, 30-33 and 35-39 depend, either directly or indirectly, from claims 1, 22, 29 and 34. Since the Applicants submit that *Mauro* fails to anticipate the independent claims 1, 22, 29 and 34 for the reasons set forth above, the Applicants further submit that *Mauro* likewise fails to anticipate each of the dependent claims 2-21, 23-28, 30-33 and 35-39. Thus, the Applicants submit that the claims 2-21, 23-28, 30-33 and 35-39 fully satisfy the requirements of 35 U.S.C. §102, and therefore, are allowable.

### **Sheynblat**

With respect to any satellite positioning information disclosed in *Sheynblat*, the Applicants submit that the abstract (and rest) of *Sheynblat* merely discloses conventional ephemeris information. The Applicants' invention, in contrast to *Sheynblat*, includes a combination of elements directed to *long term* STD, which, as noted above, (i) has a duration of validity that distinguishes it from conventional

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ephemeris information, and (ii) is valid longer (in time) than such conventional ephemeris information. Specifically, the Applicants' independent claim 1 positively recites:

"A method, comprising:

receiving long term satellite tracking data at a remote receiver from a server;

computing acquisition assistance data using said long term satellite tracking data at said remote receiver; and

receiving satellite signals at said remote receiver using said acquisition assistance data" (emphasis added).

Each of the other independent claims 22, 29 and 34 include one or more claimed elements directed to the *long term* STD.

Contrary to the Office's contentions, the Applicants submit that the above-listed sections (and the rest) of *Mauro* does not disclose, whatsoever, the claimed *long term* STD, that is, satellite tracking data that has a duration (e.g., a period) of validity of the STD that distinguishes it from conventional ephemeris information, and that is valid longer (in time) than the conventional ephemeris information. Instead, *Sheynblat* discloses determining a terminal position "based on the best set of measurements then available for the terminal [... f]or example, a "GPS-based" solution may be computed if measurements for a sufficient number of satellites are available, a "hybrid" solution may be computed if measurement for at least one GPS satellite is available, and a "terrestrial-based" solution may be computed if measurements for only base stations are available." See, e.g.; *Sheynblat* at Summary, at paragraph [0010].

The Applicants submit that any of the satellite positioning information disclosed in *Sheynblat* is not the claimed *long term* STD; that is, nothing in the disclosure of *Sheynblat* teaches or suggests that its satellite information has a duration of validity that distinguishes it from conventional ephemeris information, and that is valid longer (in time) than the conventional ephemeris information. Since *Sheynblat* lacks at least one element of each of the independent claims 1, 22, 29 and 34, namely the claimed elements *long term* STD, the Applicants submit that *Sheynblat* does not anticipate the claimed invention under 35 U.S.C. §102(e). As such, the Applicants submit that each of the independent claims 1, 22, 29 and 34 are patentable over *Sheynblat*.

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Claims 2-21, 23-28, 30-33 and 35-39 depend, either directly or indirectly, from claims 1, 22, 29 and 34. Since the Applicants submit that *Sheynblat* fails to anticipate the independent claims 1, 22, 29 and 34 for the reasons set forth above, the Applicants further submit that *Sheynblat* likewise fails to anticipate each of the dependent claims 2-21, 23-28, 30-33 and 35-39. Thus, the Applicants submit that the claims 2-21, 23-28, 30-33 and 35-39 fully satisfy the requirements of 35 U.S.C. §102, and therefore, are allowable.

### **McBurney**

With respect to any satellite positioning information disclosed in *McBurney*, the Applicants submit that the abstract (and rest) of *McBurney* merely discloses conventional ephemeris information and subsets thereof. See *McBurney* at abstract. The Applicants' invention, in contrast to *McBurney*, includes a combination of elements directed to *long term* STD, which, as noted above, (i) has a duration of validity that distinguishes it from conventional ephemeris information, and (ii) is valid longer (in time) than such conventional ephemeris information. Specifically, the Applicants' independent claim 1 positively recites:

"A method, comprising:

receiving long term satellite tracking data at a remote receiver from a server;

computing acquisition assistance data using said long term satellite tracking data at said remote receiver; and

receiving satellite signals at said remote receiver using said acquisition assistance data" (emphasis added).

Each of the other independent claims 22, 29 and 34 include one or more claimed elements directed to the *long term* STD.

Contrary to the Office's contentions, the Applicants submit that the above-listed sections (and the rest) of *McBurney* does not disclose, whatsoever, the claimed *long term* STD, that is, satellite tracking data that has a duration (e.g., a period) of validity of the STD that distinguishes it from conventional ephemeris information, and that is valid longer (in time) than the conventional ephemeris information. Instead, *McBurney* in its abstract clearly states it has "[a] server platform provides a simplified navigation-satellite constellation almanac, ephemeris, differential correction, and client services... It reduces the almanac and ephemeris satellite messages at the server platform to a set of simple polynomials that

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represent a recent satellite position and velocity. These are useful at the navigation platform to compute a current position solution with real-time data from the observation platform. An aiding data with light-weight models is provided by the server platform to the observer platform to eliminate all data storage of almanac and ephemeris, and to permit only fixed-point integer arithmetic to be used to solve for user position at the navigation platform\* (emphasis added). The Applicants submit that such simplified navigation-satellite constellation almanac, ephemeris, and differential correction are simpler in terms of time of validity. That is, the simplified navigation-satellite constellation almanac, ephemeris, and differential correction have shorter terms of validity than the conventional ephemeris information. Clearly, such simplified navigation-satellite constellation almanac, ephemeris, and differential correction is not the claimed *long term* STD.

The Applicants therefore submit that any of the satellite positioning information disclosed in *McBurney* is not the claimed *long term* STD; that is, nothing in the disclosure of *McBurney* teaches or suggests that its satellite information has a duration of validity that distinguishes it from conventional ephemeris information, and that is valid longer (in time) than the conventional ephemeris information. Since *McBurney* lacks at least one element of each of the independent claims 1, 22, 29 and 34, namely the claimed elements *long term* STD, the Applicants submit that *McBurney* does not anticipate the claimed invention under 35 U.S.C. §102(e). As such, the Applicants submit that each of the independent claims 1, 22, 29 and 34 are patentable over *McBurney*.

Claims 2-21, 23-28, 30-33 and 35-39 depend, either directly or indirectly, from claims 1, 22, 29 and 34. Since the Applicants submit that *McBurney* fails to anticipate the independent claims 1, 22, 29 and 34 for the reasons set forth above, the Applicants further submit that *McBurney* likewise fails to anticipate each of the dependent claims 2-21, 23-28, 30-33 and 35-39. Thus, the Applicants submit that the claims 2-21, 23-28, 30-33 and 35-39 fully satisfy the requirements of 35 U.S.C. §102, and therefore, are allowable.

## II. CONCLUSION

In view of the foregoing, the Applicants submit that none of the claims presently in the application are anticipated under the provisions of 35 U.S.C. § 102 or obvious under the provisions of 35 U.S.C. §103. Consequently, the Applicants

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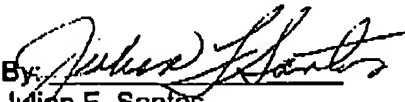
believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Office believes that any unresolved issues still exist or if, in the opinion of the Office, a telephone conference would expedite passing the present application to issue, the Office is invited to call the undersigned attorney directly at 732-978-4899 or the office of the undersigned attorney at 732-978-7100 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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Date: February 2, 2006

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